

# Redmine: **A project management software tool**

January, 2013

# *Outline*

- Introduction to Redmine.
- Important concepts of Redmine.
- How to use Redmine.

## *Introduction: What is Redmine?*

Redmine is a project management web application.

The application is written in Ruby and supports many different database servers.

Some of the features include:

- keeps track of multiple projects
- allows users to have different roles
- offers an issue tracking system
- tracks time spent on issues
- provides RSS feeds and email notifications
- provides wikis and forums for each project

## *CMPT898 Redmine server*

A Redmine server has been created for this course.

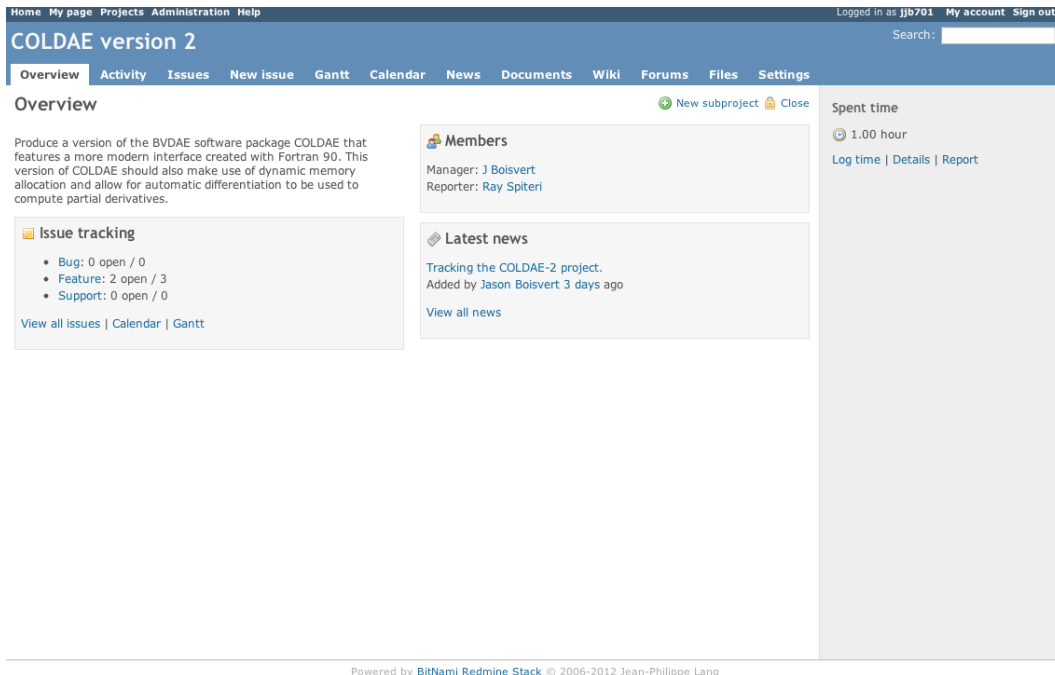
It can be found at

<https://cmpt898.usask.ca/redmine>.

Redmine is installed on a virtual machine located on a Dell r710 server with the following specs

- Dual quad core Intel Xeon X5550 (2.67GHz)
- 16 GB RAM
- 1 TB disk space

# Redmine *concepts: Project space*



## A list of projects

Redmine creates a separate space for each project.

This space describes the state of the project, e.g., the number of bugs known to exist in the code.

The space also provides access to tools to help manage the project, e.g., access to the project's wiki.

## Redmine *concepts: Issues*

Redmine uses the word [issue](#) to refer to a development task.

There are several categories of issues:

- Feature: This could be an aspect of the software package that is being developed.
- Bug: This could be a part of the software package that is not working as designed.
- Support: This could be for helping individuals use the software package.

The site administrator can create new issue categories to customize the fit for a given project.

## Redmine *concepts: Roles*

Redmine users are issued roles to determine what they are allowed to do.

Below are some common roles.

Roles are ordered below according to the number of privileges assigned to each role.

In general, a given role can do anything a lower-level role can plus some additional tasks.

### 1. Site administrator:

- Manage the Redmine site and the user accounts.
- Adjust permissions for roles.

## 2. Project manager:

- Can create space for new projects.
- Administrate a project space, e.g., manage project members and their roles.
- Manage the documents for the project, e.g., upload and delete documents.
- Administrate the wiki and forums.

## 3. Developer:

- Manage and edit issues.
- Commit changes to the repository.
- Edit the wiki.
- Manage files for the project, e.g., upload and delete files.
- Make changes to the repository.

## 4. Reporter:

- Create and view issues.
- Log time spent on issues.
- Browse repository.
- View the wiki.
- Participate in forum discussions.



# Using Redmine: Creating space for a new project

Home My page Projects Administration Help Logged in as jbb701 My account Sign out

Redmine Search:

### New project

Name \*

Subproject of

Description **B I U S C H1 H2 H3**  [Text formatting](#)

Identifier \*   
Length between 1 and 100 characters. Only lower case letters (a-z), numbers, dashes and underscores are allowed.  
Once saved, the identifier cannot be changed.

Homepage

Public

Modules

<input checked="" type="checkbox"/> Issue tracking	<input checked="" type="checkbox"/> Time tracking	<input checked="" type="checkbox"/> News	<input checked="" type="checkbox"/> Documents
<input checked="" type="checkbox"/> Files	<input checked="" type="checkbox"/> Wiki	<input checked="" type="checkbox"/> Repository	<input checked="" type="checkbox"/> Forums
<input checked="" type="checkbox"/> Calendar	<input checked="" type="checkbox"/> Gantt		

Trackers

<input checked="" type="checkbox"/> Bug	<input checked="" type="checkbox"/> Feature	<input checked="" type="checkbox"/> Support
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## Create space for a new project

Projects can be added by selecting Projects tab and clicking on New project.

By default, only site administrators and project managers can create space for a new project.

## *Using Redmine: Creating space for a new project*

When creating a project, a name and an unique identifier must be provided.

The identifier is used as part of the url of the project space and therefore should not be changed after the project creation.

Optionally, a description and a home page of the project can be provided.

The project can also be listed as a subproject of a project already listed on Redmine.

At least one person working on the project should be designated as a project manager.

## *Using Redmine: Finding a project*

A list of projects is available on the Projects tab.

Alternatively, you can find a specific project by using the url:

`https://cmpt898.usask.ca/redmine/projects/ <identifier>`

where <identifier> is the identifier given when the space for the project was created.

# Using Redmine: Creating a new issue

The screenshot shows the 'New issue' form in Redmine. The form is titled 'New issue' and is part of the 'COLDAE version 2' project. The form includes the following fields and options:

- Tracker:** Bug (dropdown menu)
- Subject:** (text input field)
- Description:** (rich text editor with formatting options like Bold, Italic, Underline, etc.)
- Status:** New (dropdown menu)
- Priority:** Normal (dropdown menu)
- Assignee:** (dropdown menu)
- Parent task:** (text input field)
- Start date:** 2013-01-22 (calendar icon)
- Due date:** (calendar icon)
- Estimated time:** (text input field) Hours
- % Done:** 0% (dropdown menu)
- Optional description:** (text input field)
- Files:** Choose File (No file chosen), Add another file (Maximum size: 5 MB)
- Watchers:** J Boisvert, Ray Spiteri (checkboxes)

Buttons at the bottom: Create, Create and continue, Preview.

## Creating a new issue

An issue is for tasks that require specific attention from project members and may affect the project state.

By creating an issue, the work performed on the issue can be tracked by all the project members.

Other project members can add their own insight into the issue and ensure redundant work is not being done.

## *Using Redmine: Creating a new issue*

To create an new issue, select the `New issue` tab and fill out the required fields.

The following information can be specified:

- **Tracker:** Indicate the issue category.
- **Subject:** A short (but meaningful!) description of the issue.
- **Description:** A place to add details.
- **Status:** The state of the issue.

Typically, the issue starts off as *new*.

As work is performed on the issue, the state will change to *in progress* and eventually *closed*.

- **Assignee:** The project member who has been assigned to work on the issue.

- Start date and due date: A way to set a planned date for when the issue will be resolved.
- Files: A way to upload any files relevant to the issue, e.g., output from the software.
- Watchers: Project members who receive notifications about status updates to the issue.

# Using Redmine: Existing issues

The screenshot shows a Redmine issue page for 'Feature #1'. The page title is 'COLDAE version 2'. The issue title is 'Create a routine that generates the linear system of collocation conditions'. The issue is in 'In Progress' status, assigned to 'Jason Boisvert', with a priority of 'Normal'. The start date is '01/18/2013' and the due date is '01/31/2013'. The estimated time is '15.00 hours' and the % Done is '0%'. The description is 'Write the routine that generates a linear system of collocation conditions. This routine should produce an ABD matrix that can be passed to a linear solver.' The history shows two updates by Jason Boisvert, with the subject changed from 'Create a routine that generates the linear system of collocation conditions' to 'Create a routine that generates the linear system of collocation conditions'. The issue is also available in Atom and PDF formats.

Status:	In Progress	Start date:	01/18/2013
Priority:	Normal	Due date:	01/31/2013
Assignee:	Jason Boisvert	% Done:	0%
Category:	-	Estimated time:	15.00 hours
Target version:	-	Spent time:	-

## Displaying an existing issue

Existing issues can be displayed from the Issues tab.

## *Using Redmine: Existing issues*

Specific actions for issues include:

- **Update:** A description of the progress on the issue can be added. Project members can also indicate the percentage of the work complete on the issue and modify the status of the issue.
- **Log time:** A project member can indicate the amount of time spent on the issue. This can be used to help budget time on similar future issues.
- **Watch:** A project member can choose to become a watcher for the issue.

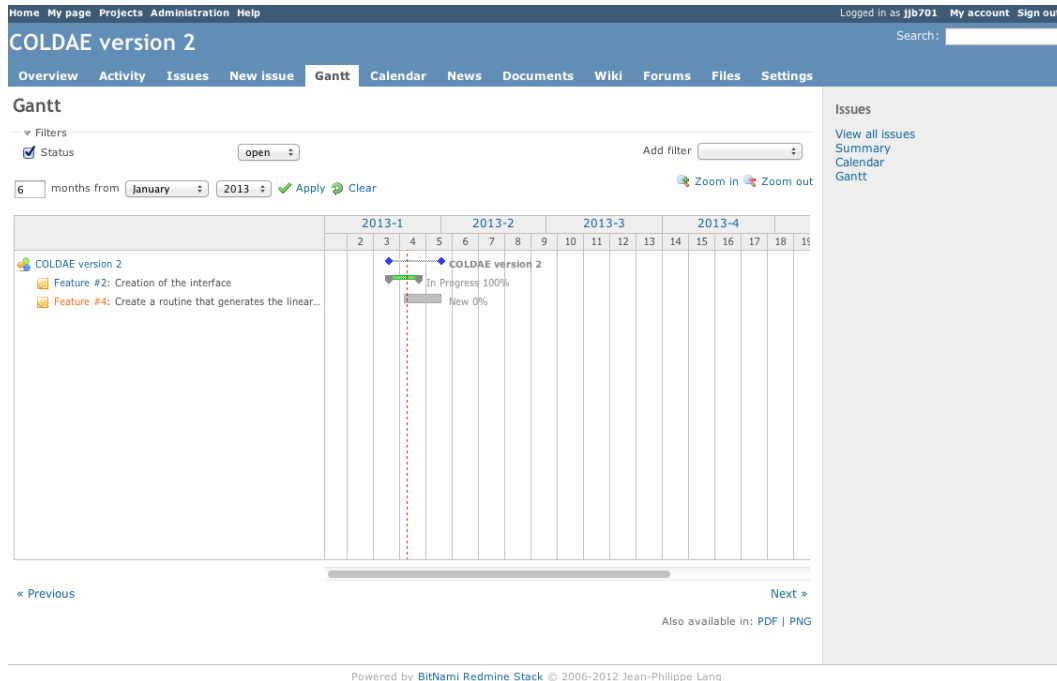
The issue can also be broken down into subtasks by adding issues to the `Subtasks` list.

Similarly, any other issues can be indicated by adding related issues to the `Related issues` list.

By default, only managers can delete issues.



# Using Redmine: Tracking progress



## A Gantt chart for a project

Redmine offers a few ways to track progress on issues:

- Calendar: Redmine automatically adds start and due dates of issues to the calendar.
- Gantt chart: Redmine produces a Gantt chart for the progress of a project, including the start and due dates, status, and resolution of issues.

## *Using Redmine: Repository*

Redmine can link to the version control systems:

- Subversion
- Darcs
- Mercurial
- CVS
- GIT

These systems can be used as code repositories and also keep track of changes made to the code.

A version control server using one of the above systems must be set up on a separate computer.

The project manager can then link the Redmine page to the version control system by modifying settings in the project space.

## *Using Redmine: Other useful tools*

Redmine provides a variety of other tools for project members to use:

- **News:** Important general information about the status of the project can be added here.
- **Documents:** A place to add user manuals and other technical documentation.
- **Wiki:** A place to describe the project. The typical wiki tools can be used to edit these pages.
- **Forums:** A place to discuss the project with other members.
- **Files:** A place to upload files used for the development of the project. Note that this function does not include version control and therefore is not a substitute for a version control system.